







[0022] FIG. 1 shows a first exemplary embodiment of an inventive household appliance which takes the form of a cooking appliance and of which only the two-part front 2 is shown. When the household appliance of the present invention is in the normal operating position, front 2 of the household appliance extends substantially perpendicular to an installation surface (not shown in FIG. 1) of the household appliance. A console-type user control and display unit 6 is provided on outer surface 4 of front 2. In this exemplary embodiment, user control and display unit 6 takes the form of a so-called touch screen 6.1, i.e., a possible type of a display unit having control elements. The interior of housing 6.2 of user control and display unit 6 accommodates control electronics (not shown), which are in signal communication with control and display elements 6.1 of user control and display unit 6 and with power electronics located in the remainder (not shown) of the household appliance.

[0023] Housing 6.2 of user control and display unit 6 is arranged on outer surface 4 of front 2 in such a manner that at least the area of housing 6.2 where the control electronics are located is permanently traversed by a flow of ambient air. This becomes particularly apparent from FIG. 2.

[0024] In the present exemplary embodiment, the household appliance has a body (not shown) and a door 8, and front 2 includes an upper part and a lower part, the upper part being attached to the body and the lower part forming a unit with door 8. When door 8 is closed, the body and door 8 bound a cooking chamber (not shown). User control and display unit 6 is disposed on the upper part of front 2 on the outer surface 4 thereof. Door 8 has a handle 10 attached thereto. Handle 10 is designed such that it gives the visual impression of an extension of console-type user control and display unit 6 when door 3 is closed, as shown in FIG. 1.

[0025] When the household appliance of the present invention is in the normal operation position shown in FIG. 1, user control and display unit 6 and handle 10 are substantially equally spaced from the lateral edges 4.1 of front 2.

[0026] FIG. 2 shows the first exemplary embodiment in a partial side view. As can be clearly seen from FIG. 2, housing 6.2 of user control and display unit 6 is arranged on outer surface 4 of front 2 in such a manner that at least the area of housing 6.2 where the control

electronics are located is permanently traversed by a flow of ambient air. To this end, in the present exemplary embodiment, user control and display unit 6 is mounted to the upper part of outer surface 4 of front 2 by means of mounting blocks 12 in a manner known to those skilled in the art. In this exemplary embodiment, the signal transmission link (not shown) between the control electronics located in housing 6.2 and power electronics located in the body (not shown) is provided by electrical wires running through one of mounting blocks 12. Alternatively, any other signal transmission link known to those skilled in the art could be used.

[0027] The household appliance of the present invention, therefore, provides improved protection of the control electronics of the user control and display unit from elevated temperatures.

[0028] In order to further improve this effect of the aforementioned arrangement of user control and display unit 6, which provides a permanent flow of ambient air around housing 6.2, the mounting blocks 12 of the present exemplary embodiment are designed in a manner that substantially avoids heat transfer between the upper part of front 2 and/or the body and user control and display unit 6. To this end, mounting blocks 12 are made from a material having a low thermal conductivity. Alternatively, insulating layers having a low thermal conductivity could be provided between mounting blocks 12 and user control and display unit 6 and/or the upper part of front 2. Furthermore, it is also conceivable to provide the back of user control and display unit 6, which faces the upper part, with a coating that reflects thermal radiation. Moreover, other measures known to those skilled in the art and suitable for minimizing the heat transfer between the upper part of front 2 and user control and display unit 6 may also be used, alone or in combination with each other.

[0029] In a departure from the first exemplary embodiment, it is possible that when door 8 is closed, a cooling air inlet port or vapor exhaust port disposed on the body is covered by display and user control unit 6 in such a manner that the inlet or exhaust port cannot be visually perceived when looking in a direction perpendicular to outer surface 4 of front 2.

[0030] Alternatively or additionally, it is also conceivable that when door 8 is closed, the cooling air inlet port or vapor exhaust port is covered by display and user control unit 6 in

